CITY OF LODI INFORMAL INFORMATIONAL MEETING "SHIRTSLEEVE" SESSION CARNEGIE FORUM, 305 WEST PINE STREET TUESDAY, JUNE 24, 2008

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, June 24, 2008, commencing at 7:04 a.m.

A. ROLL CALL

Present: Council Members – Hitchcock, Hansen, and Katzakian

Absent: Council Members – Johnson and Mayor Mounce

Also Present: Deputy City Manager Krueger, Deputy City Attorney Magdich, and City Clerk Johl

B. <u>TOPIC(S)</u>

B-1 "PCE/TCE Work Plan for 2008-09"

Public Works Director Wally Sandelin and Phil Smith and Patrick Hubbard of Treadwell & Rollo provided a PowerPoint presentation regarding the PCE/TCE Work Plan. Specific topics of discussion included a review of the four City plumes, background, Central Plume area of high PCE concentrations and Citywide remediation, regulatory steps, public participation, current soil vapor extraction (SVE) system, ongoing cleanup of PCE from soil and groundwater using SVE, remedial actions, SVE, and groundwater extraction efforts.

In response to Mayor Pro Tempore Hansen, Mr. Hubbard stated that, with respect to the Busy Bee area, the contractor installed some equipment, the Regional Board approved the Remedial Action Plan, a letter regarding the same is pending, and when the letter is received the equipment can be turned on and remediation can begin.

In response to Council Member Hitchcock, Mr. Smith stated that, with respect to the equipment behind Lodi Adopt-A-Child site, the firm performing the work, whom the Regional Board is directly in contact with while having oversight of the project, had some issues to work through and is likely behind on actual remediation efforts by a year or two.

In response to Council Member Hitchcock, Mr. Hubbard stated there are currently no extraction wells. He stated Well No. 6 is an existing City water well and will work for containment purposes in that particular plume.

In response to Council Member Hitchcock, Mr. Hubbard explained the difference in the treatment process between SVE versus pump and treat efforts. He stated which treatment will be used is based on concentration levels in the soil and the groundwater.

In response to Mayor Pro Tempore Hansen, Mr. Hubbard and Mr. Smith stated approximately 100 pounds a month of PCE is being pulled near the Oak and Church Street sites and cumulative tests took out approximately 8,000 pounds.

In response to Council Member Hitchcock, Mr. Smith stated SVE is used to treat the soil levels and the pump and treat efforts are used for groundwater treatment. He stated the Central Plume is a source area that has spread.

In response to Mayor Pro Tempore Hansen, Mr. Smith confirmed that the total taken out is 13,000 pounds, which includes the 8,000 pounds taken out during cumulative testing.

In response to Council Member Hitchcock, Mr. Hubbard stated the two alternatives they are reviewing include a reaction with oxygen that breaks down PCE molecules and air stripping, which includes cascading water through beads, break down of the water so that the PCE is released into the air, and then captured.

In response to Mayor Pro Tempore Hansen, Mr. Hubbard stated both alternatives are tried and true and have been used effectively in other communities.

In response to Myrna Wetzel, Mr. Hubbard stated there is no residue if the oxygen method is used and the PCE is captured and recycled through carbon through the air stripping method.

In response to Council Member Katzakian, Mr. Hubbard stated the weight is based on a chemical analysis number, which includes multiplying by the flow rate. He stated the liters are multiplied by the micrograms and grams are converted to pounds. Mr. Hubbard stated PCE is generally one and a half times heavier than water.

In response to Council Member Katzakian, Mr. Hubbard stated air stripping includes water pumped out of the ground, similar to a fountain, and as it cascades down there is a break down whereby the PCE separates out and is passed through carbon and recycled.

In response to Council Member Hitchcock, Mr. Hubbard stated the yellow diamonds on the chart show monitoring wells along the edges of the contamination, which will continue to estimate the amount of PCE remaining in the plumes and the decreases over a period of time.

In response to Council Member Hitchcock, Mr. Hubbard stated the cost estimates currently go out at least 50 years and are in the tens of millions of dollars.

In response to Mayor Pro Tempore Hansen, Mr. Hubbard stated SVE will be used for Phase 1 into the next year or so followed by an evaluation, Phase 2 will take another few years, and then there will likely be diminishing returns. He stated the amount of decrease will be based on the concentration levels in particular areas and the clean-up and abatement order will likely have a mechanism that allows for the wells to be shut off when diminishing returns are shown. Mr. Hubbard stated technology currently does not allow for complete removal.

In response to Mayor Pro Tempore Hansen, Mr. Hubbard and Mr. Smith stated the City has a good relationship with the Board and the roles have reversed somewhat whereby the City is now driving the process to get the work completed.

In response to Mayor Pro Tempore Hansen, Mr. Hubbard stated the order will likely be finalized this summer and the remedial action plan will be finalized next year.

Council Member Hitchcock requested that the City Council be provided with a timeline and cost estimates when there is a better understanding of what they may be after the order and plan are finalized.

In response to Mayor Pro Tempore Hansen, Mr. Sandelin stated that, while the technology known today shows that PCE may never completely be removed from high concentration areas, at some point the Board will permit the City to install its own treatment heads on City wells and proceed in that manner.

In response to Mayor Pro Tempore Hansen, Mr. Sandelin stated the levels that can remain are based on five parts per billion or less.

In response to Council Member Katzakian, Mr. Hubbard stated the drinking water standard is arrived at by looking at public health and water supply treatment. He stated the standard has been in place for 20 years or so and as technology changes the standard may also change.

Continued June 24, 2008

In response to Council Member Hitchcock, Mr. Sandelin stated there will likely not be any surface water treatment impact. He stated they will go through a water balancing exercise but it will likely remain separate and distinct.

Jim Weightly questioned what affect a well and remediation efforts in the Central Plume will have on his drinking water and property. Mr. Smith stated they will respond to Mr. Weightly after they obtain specifics about the subject property and well.

C. COMMENTS BY THE PUBLIC ON NON-AGENDA ITEMS

None.

D. ADJOURNMENT

No action was taken by the City Council. The meeting was adjourned at 8:04 a.m.

ATTEST:

Randi Johl City Clerk



AGENDA TITLE: PCE/TCE Work Plan for 2008109

MEETING DATE: June 24,2008 (Shirtsleeve Session)

PREPARED BY: Public Works Director

RECOMMENDED ACTION: Receive information regarding the PCE/TCE Work Plan for 2008/09.

BACKGROUND INFORMATION: Patrick Hubbard and Phil Smith of Treadwell & Rollo, the City's

PCE/TCE consultant, will present the attached information and

answer questions on the PCE/TCE Work Plan for 2008/09.

FISCAL IMPACT: Not applicable,

FUNDING AVAILABLE: Not applicable.

F. Wally Sandelin
Public Works Director

FWS/pmf

Attachment

APPROVED:

[✓]Blair King, City Manage

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PCE/TCE Workplan 2008 - 2009

City of Lodi Shirtsleeve Meeting
24 June 2008

Patrick Hubbard and Phil-Smith

Treadwell & Rollo

FOUR CITY PLUMES

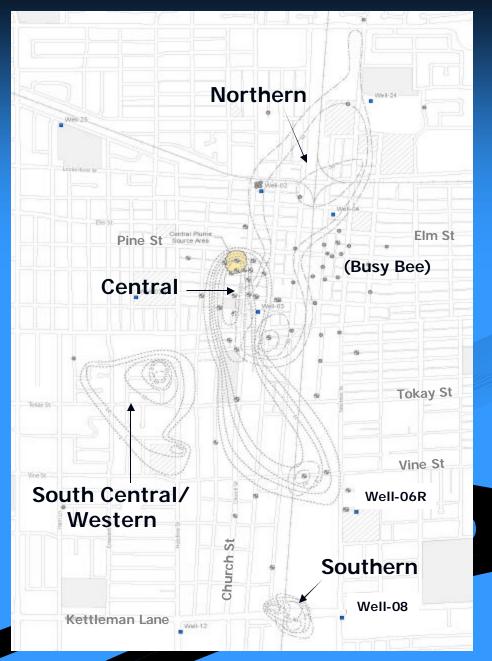
1. <u>Central Plume</u> – Source Area and Groundwater

2. Northern Plume, 3. South Central/ Western, and 4. Southern Plumes – Groundwater

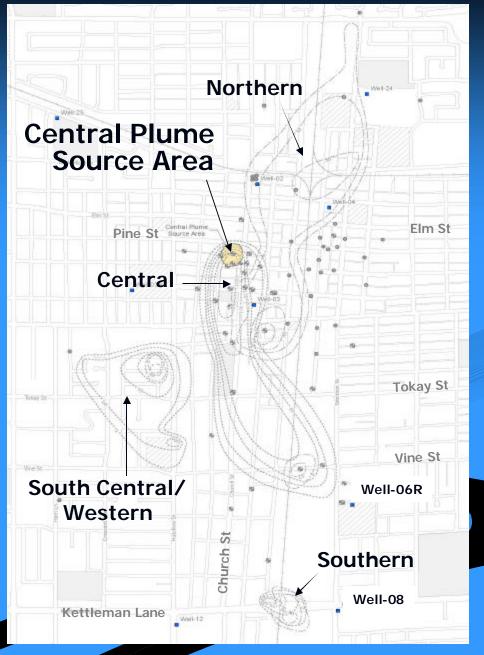
(combined with Central Plume work)

Busy Bee – PRPs and contractor to address source area and groundwater

Background



Central Plume Area of High PCE Concentrations (SOURCE AREA) and City-wide REMEDIATION



REGULATORY STEPS

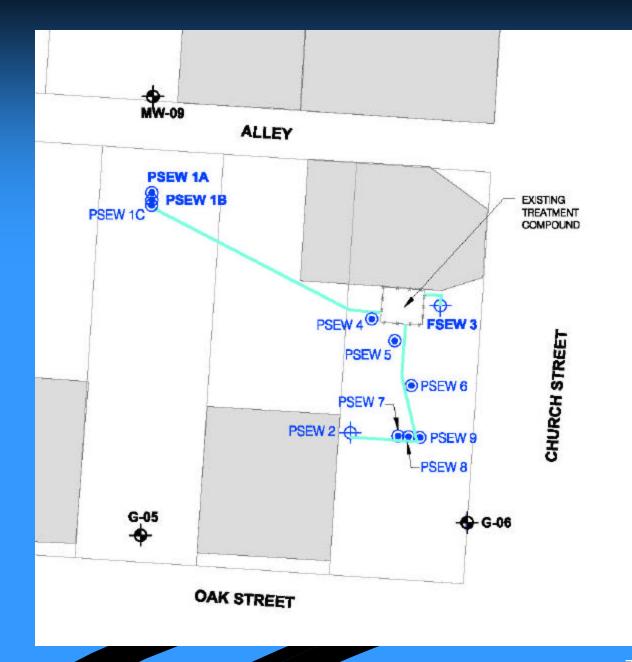
Cleanup and Abatement Order to Water Board:

- 1) EE/CA- Engineering Evaluation/Cost Analysis
 FY 2008/09 Central Plume Source Area Soil Vapor
 Extraction (SVE) and Groundwater Pump and Treat
 - 2) FS Feasibility Study 2009 - Selection of City-wide Groundwater Pump and Treat
 - 3) RAP Remedial Action Plan
 2009 Final Plan for City-wide Groundwater Pump
 and Treat

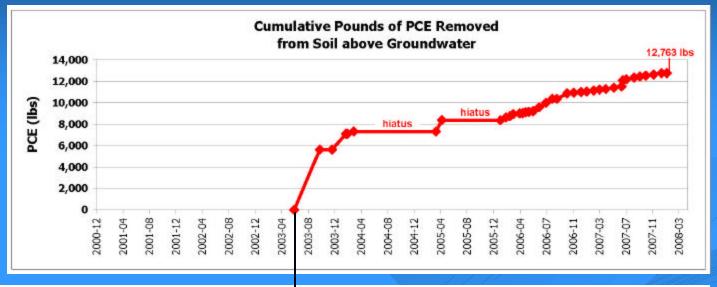
PUBLIC PARTICIPATION

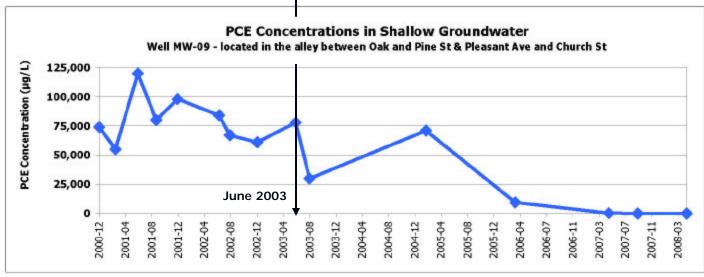
- EE/CA Public Comment and Community Fact Sheet (scheduled for August 2008)
- RAP Public Comment, Fact Sheet, and Meeting, as needed
- Future Round of Indoor Air Sampling (initial sampling event took place in August 2004)

Current SVE System

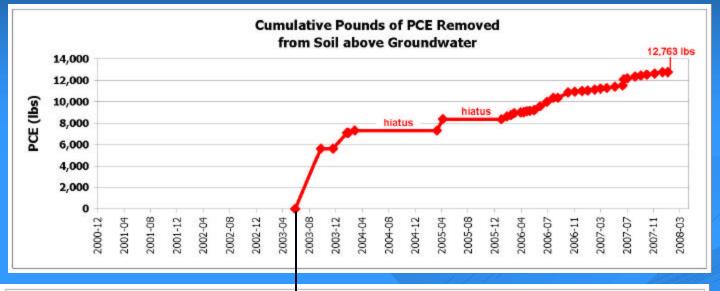


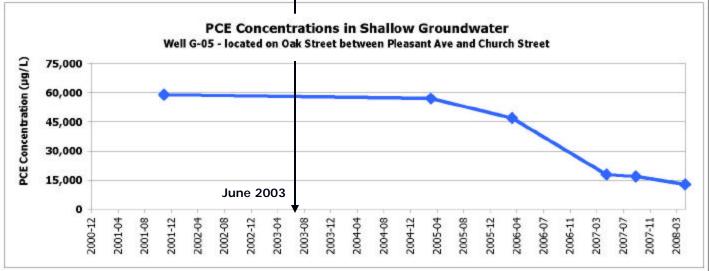
Ongoing Cleanup of PCE from Soil and Groundwater using SVE (indoor air effect=?)





Ongoing Cleanup of PCE from Soil and Groundwater using SVE (indoor air effect=?)





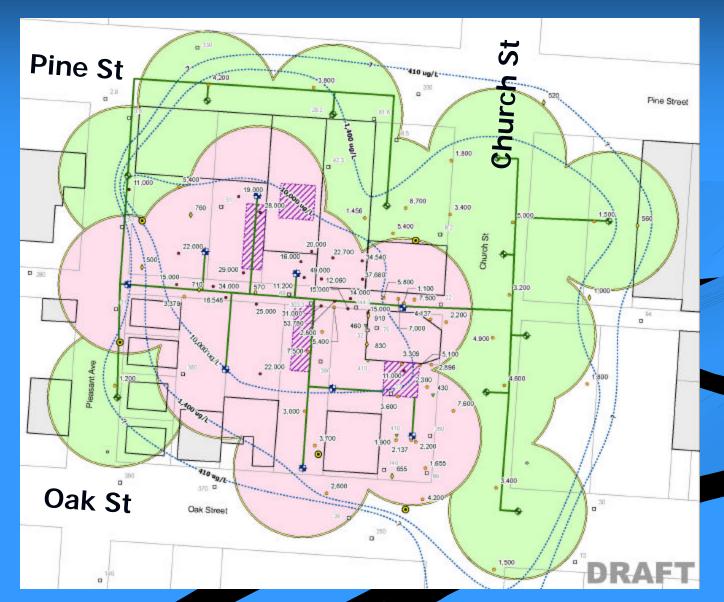
REMEDIAL ACTIONS 2008 – 2009 Central Plume Source Area

Soil Vapor Extraction (SVE) - Phase I



Groundwater Extraction - Wells at Oak St

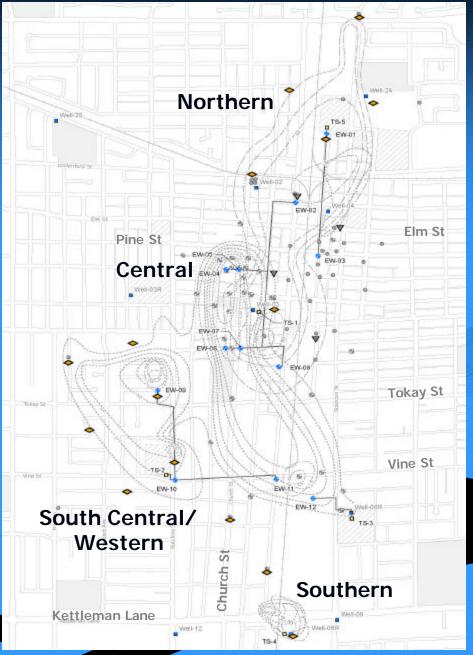
Soil Vapor Extraction (SVE) Phase I – FY 2008/09



Groundwater Extraction - FY 2008/09 Wells at Oak Street



GROUNDWATER EXTRACTION City-wide System



QUESTIONS & ANSWERS 14